The MT Laboratory Sentinel

Updates from the MT Laboratory Services Bureau 09/11/09 http://healthlab.hhs.mt.gov/





Mobile food-safety labs get FDA up to speed

Two months ago, three gleaming white trailers — the Food and Drug Administration's \$3 million mobile food-safety lab — rolled into Nogales Arizona, a major port of entry for people and goods coming from Mexico. They joined an alphabet soup of federal agencies sifting through millions of tons of goods in search of drugs, guns, invasive plants and tainted foods.

The lab represents a new era for the agency in keeping the food supply safe. It is a tool that can be suited up and rolled out to anyplace in the country facing the danger of contaminated food, whether at the hand of terrorists or Mother Nature. The labs bring our cutting-edge technology closer to where food is grown or imported into the country. Tools like our mobile labs help make our food supply safer by allowing us to identify a potential problem faster, enabling us to react more quickly and limiting exposure to a food-borne pathogen (usually salmonella and *E. coli* O157:H7) that may make people sick. When they get a positive, they feel they may have stopped an outbreak.

In the three weeks the trailers were based in Nogales before heading to their next assignment, the FDA estimates that direct contact with the truckers shaved tens of thousands of dollars in testing costs and spoiled produce. The mobile unit also may help repair the agency's reputation, which has been battered by public frustration with the contamination of such popular foods as peanuts and spinach. Usually, this work would all be done by the 13 FDA inspectors permanently assigned to Nogales, who ship samples to one of the FDA's 13 labs. But the process can take up to 11 days. DNA technology can yield results in 36 hours.

Seventy percent of the fruits and vegetables Americans consume in winter are imported from Mexico, a total of 7 billion pounds. About half comes through Nogales. The road that leads to the border begins to fill with trucks carrying fruits, vegetables and manufactured goods at 6:30 a.m. By noon there can be a line of trucks up to 7 miles long snaking through the low desert hills waiting to make the crossing.

There is palpable tension in the air as agents under the protection of armed guards examine cargo. Gun battles with would-be smugglers are rare, but they do happen. In this setting, the scientists inside the mobile lab refer to their time as a deployment. They train hard on quick response. The lab is designed to handle biohazards as deadly as anthrax and the West Nile virus. If a terrorist attack on the nation's food supply were suspected, they can break down and be on the road in six hours.

The lab was built in 2005. Its deployments have included Louisiana after Hurricane Katrina to test water. And last August, scientists drove to California's Salinas Valley to test leafy greens in an effort to head off a recurrence of the E. coli outbreak in spinach in 2006.

Read this interesting article in its entirety by holding the control key and clicking on the link http://www.usatoday.com/news/health/2009-05-03-fda-mobile N.htm?obref=obnetwork

VIDEO: See how \$3 million lab works

Coming Next Week: Influenza Updates

News in *APHL e-Update* August 13, 2009

CDC Evaluates RIDTs Used in Detection of H1N1

The August 7 issue of the Morbidity and Mortality Weekly Report details analytical studies comparing the performance of three commercially available rapid influenza diagnostic tests (RIDTs) with the rRt-PCR assay developed by CDC & approved as a Section 501(k) device by the FDA. The results showed that, although the RIDT were capable of detecting the novel H1N1 virus respiratory specimens containing high levels of the virus, the overall sensitivity was 40%-69% among all specimens tested and declined substantially as virus levels decreased. Control key and click to Read more.

Los Alamos Laboratory Looks to Quicken Disease Monitoring

The Los Alamos National Laboratory is working toward establishing a quick, low-cost, automated network performing animal surveillance at a scale never before seen. This approach will offer science-based advice that can help public health officials assess the potential impact of outbreaks that are likely to jump project species. The being developed at Los Alamos involves approach three-pronged consisting of genome sequencing, culturing and screening. Control key and click to Read more.

Please visit the Laboratory Services Bureau Website http://healthlab.hhs.mt.gov/

MT Communicable Disease Update as of 09/04/09

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.

Questions regarding its content should be directed to 406.444.0273 (24/7/365).

http://cdepi.hhs.mt.gov

<u>Summary – Week 34 – Ending 8/29/09</u> – Disease reports received at DPHHS during the reporting period August 23 - 29, 2009 included the following:

- Vaccine Preventable Diseases: Varicella (2), Pertussis (3), Invasive Streptococcus pneumoniae (1)
- Enteric Diseases: Campylobacter (4), Cryptosporidia (4), Giardia (3), E. coli O157:H7 (7), Salmonella (1)
- Other: Animal rabies 2 bats, West Nile virus –1 new human case (total for 2009 season = 4), viral meningitis 1
- Travel Related Conditions: Coccidioidomycosis

Influenza

- Surveillance Although July 24, 2009 was the last date that the CDC and Montana provided information on individual confirmed and probable cases of novel H1N1 influenza, please continue to report hospitalizations and deaths due to novel H1N1 influenza. No specific follow-up is required for H1N1 cases control measures are the same as for seasonal influenza. (http://www.cdc.gov/flu/protect/stopgerms.htm). Montana will continue to use standard surveillance systems to track the progress of the novel H1N1 influenza outbreak in the same way influenza activity is monitored for other influenza viruses at http://cdepi.hhs.mt.gov.
- **NEW!** Clusters As expected, clusters of ILI and confirmed 2009 H1N1 cases have appeared in several locations in Montana as schools and universities are back in session.
- NEW! IOM Mask Recommendation The Institute of Medicine released its recommendations regarding mask usage for cases of 2009 H1N1 influenza in a report on September 3, 2009, available at http://www.iom.edu/CMS/3740/71769/72967.aspx. They recommended continuing CDC's current guidance, that in addition to standard and contact precautions, "All healthcare personnel who enter the rooms of patients in isolation with confirmed, suspected, or probable novel H1N1 influenza should wear a fit-tested disposable N95 respirator or better." CDC is expected to release revised guidance by October 1, 2009
- NEW! New CDC Guidance Documents
 - <u>Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season</u> (http://www.cdc.gov/h1n1flu/recommendations.htm)
 - Preparing for the Flu: A Communication Toolkit for Child Care and Early Childhood Programs (http://www.cdc.gov/h1n1flu/childcare/toolkit/)

NEW! Mumps – There have been a couple of mumps "scares" recently – neither of which tested positive for acute mumps. Infectious parotitis can be caused by many different agents. In order to definitively diagnose mumps, it is recommended that both a buccal swab and a blood specimen be collected from patients with an illness with acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary gland(s), lasting at least 2 days, and without other apparent cause. Blood should be tested for mumps IgM and IgG (at the time of diagnosis) and the buccal swab with viral culture and/or RT-PCR (within 1-3 days of onset of parotitis). Call CDEpi if you have questions about mumps or mumps diagnosis.

NEW! Pertussis – Just to keep everyone on their toes, there have been 3 cases of pertussis reported during the last two weeks. Viral respiratory season has started early! Anyone with a cough of >14 days duration, an inspiratory whoop and/or post-cough vomiting or breathlessness should be tested for pertussis. *Test only symptomatic persons*. Ensure appropriate treatment of cases and prophylaxis for close contacts. Use the *CDC Guidelines for the Control of Pertussis Outbreaks* for case investigation and follow-up. (http://www.cdc.gov/vaccines/pubs/pertussis-guide/guide.htm)

UPDATE! West Nile Virus Surveillance – There have been four human cases of WNV disease in Montana in 2009 to date – Sanders (2), Lake and Garfield Counties. For more information on WNV activity in the nation and to learn how to prevent WNV: http://www.cdc.gov/ncidod/dvbid/westnile/index.htm.

NEW! <u>Influenza College/University Campuses</u> – The American College Health Association is conducting ILI surveillance on a sample of colleges and universities around the country. This includes two universities in Montana. The information is updated weekly. http://www.acha.org/ILI_LatestWeek.cfm#chart_state

Rabies – We are pleased to announce that effective immediately, IMOVAX® Rabies, Rabies Vaccine is available for both pre-exposure use and post-exposure prophylaxis. As a result, <u>it is no longer necessary to obtain a pass code prior to ordering IMOVAX Rabies vaccine</u>. IMOVAX can now be ordered with no limits for both pre- and post-exposure prophylaxis. Sanofi Pasteur is now in the process of sending out information about this change to all of their customers this week. Please ask providers to continue to report potential rabies exposures to the local health department. Rabies exposure assessment algorithm: http://www.dphhs.mt.gov/PHSD/epidemiology/documents/RABIESASSESSENTDPHHS.pdf.